

With pneumatic and electric actuators

ARI-STEVI® 470

Pneumatic actuator
ARI-DP 32 - 34T

- Reversible pneumatic actuator
- Actuator with rolling diaphragm
- Air supply pressure max. 6 bar
- Stem protection by bellow
- Maintenance-free O-ring sealing
- Assembly of additional devices acc. to DIN IEC 60534-6



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Fig. 470

ARI-STEVI® 470

Electric actuator
ARI-PREMIO-Plus 2G 5 - 25kN

- Enclosure IP 65
- 2 torque switches
- Handwheel
- Additional devices available, e.g. potentiometer



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ARI-STEVI® 470

Electric actuator
AUMA SAR 07.2 - 10.2

- Enclosure IP 67
- 2 torque switches
- 2 travel switches
- Handwheel
- Overheating protection for motor as standard
- Additional devices available, e.g. potentiometer
- Explosion proof version available


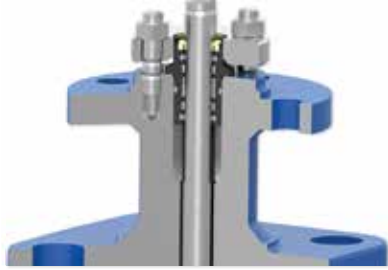
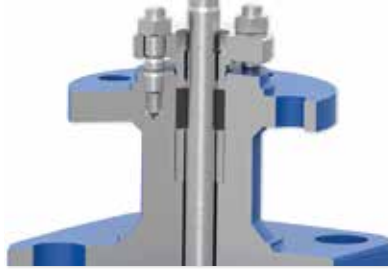


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Features:

- High performance control valve
- Large volume body
- Robust bonnets with traverse for 4x90° actuator assembly
- Blow-out proof stem
- Solid plug guiding
- Replaceable trim
- Optional multistage trim for critical operating conditions
- Optional flow divider for noise reduction

Figure	Version	Nominal pressure	Material	Nominal diameter	
36.470	with flanges	PN63	1.0619+N	DN25-150	Information / restriction of technical rules need to be observed! A production permission acc. to TRB 801 No. 45 is available. The engineer, designing a system or a plant, is responsible for the selection of the correct valve. Resistance and fitness must be verified, contact manufacturer for information (refer to Product overview and Resistance list).
37.470	with flanges	PN100	1.0619+N	DN25-150	
38.470	with flanges	PN160	1.0619+N	DN25-150	
56.470	with flanges	PN63	1.4408	DN25-150	
57.470	with flanges	PN100	1.4408	DN25-150	
58.470	with flanges	PN160	1.4408	DN25-150	
Other materials and versions on request.					

Stem sealing			
Fig. 470	standard	optional	
	DN25- 150	DN25- 150	DN25- 150
	 <p>I. PTFE-V-ring unit -10°C to 220°C</p>	 <p>I. EPDM-sealing -10°C to 150°C (allowed for water and steam up to 180°C)</p>	 <p>II. Pure graphite-packing -10°C to 400°C</p>

Pressure-temperature-ratings Intermediate values for max. permissible operational pressures can be determined by linear interpolation of the given temperature / pressure chart.

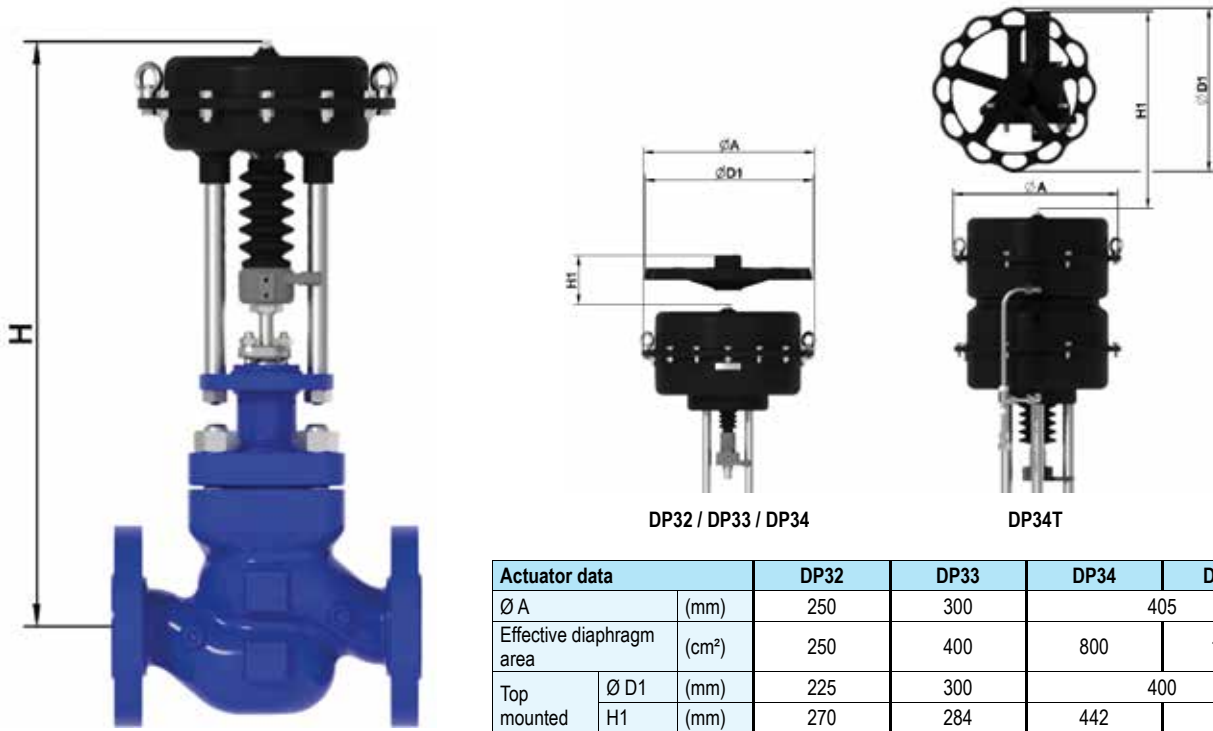
acc. to manufacturers standard			-60°C to <-10°C ¹⁾	-10°C to 50°C	100°C	150°C	200°C	250°C	300°C	350°C	400°C
1.0619+N	PN63	(bar)	on request	63	59	56	53	48	44	41	38
1.0619+N	PN100	(bar)		100	93	88	83	76	69	64	60
1.0619+N	PN160	(bar)		160	149	141	133	122	110	103	95

acc. to DIN EN 1092-1			-60°C to <-10°C ¹⁾	-10°C to 100°C	150°C	200°C	250°C	300°C	350°C	400°C
1.4408	PN63	(bar)	on request	63	57,3	53,1	50,1	46,8	45,0	43,2
1.4408	PN100	(bar)		100	90,9	84,2	79,5	74,2	71,4	68,5
1.4408	PN160	(bar)		160	145,5	134,8	127,2	118,8	114,2	109,7

¹⁾ Studs and nuts made of A4-70 (at temperatures below -10°C)

Plug design																																		
	Parabolic plug, metal seat (Standard) - from Kvs 0,1 - Flow characteristic glp (from Kvs 100 modified) linear - Rangeability 50/1 - Leakage class: • IV acc. to IEC 60534-4 (Standard) • IV-S1 acc. to IEC 60534-4 (Optional) - Stable shaft guide - Medium liquids, gases, steam - Incoming flow against closing direction		Parabolic plug with armoured sealing edge - from Kvs 0,1 - Flow characteristic glp (from Kvs 100 modified) linear - Rangeability 50/1 - Leakage class: • IV acc. to IEC 60534-4 - Stable shaft guide - Medium liquids, gases, steam - Incoming flow against closing direction																															
	Parabolic plug with PTFE-soft seal (max. 200°C) - from Kvs 0,1 - Flow characteristic glp (from Kvs 100 modified) linear - Rangeability 50/1 - Leakage class: • VI acc. to IEC 60534-4 - Stable shaft guide - Medium liquids, gases, steam - Incoming flow against closing direction		V-port plug metal seat - ab Kvs 40 - Flow characteristic glp (from Kvs 100 modified) linear - Rangeability 30/1 - Leakage class: • IV acc. to IEC 60534-4 (Standard) • IV-S1 acc. to IEC 60534-4 (Optional) - double guide (shaft/seat ring) - Medium liquids, gases, steam - Incoming flow against closing direction																															
	Perforated plug metal seat -from Kvs 0,1 - Flow characteristic glp (from Kvs 100 modified) linear - Rangeability 30/1 - Leakage class IV acc. to IEC 60534-4 - double guide (shaft/seat ring) - Medium liquids, gases, steam - Flow against or in closing direction - Noise reduction up to -15 dB(A)		Perforated plug two-stage, metal seat - fully regulated - ab Kvs 1,3 - Flow characteristic glp (from Kvs 100 modified) linear - Rangeability 30/1 - Leakage class IV acc. to IEC 60534-4 - double guide (shaft/seat ring) - Medium gases, steam - Incoming flow against closing direction - Noise reduction up to -25 dB(A)																															
	Perforated plug three-stage, metal seat - fully regulated - ab Kvs 0,8 - Flow characteristic glp (from Kvs 100 modified) linear - Rangeability 30/1 - Leakage class IV acc. to IEC 60534-4 - double guide (shaft/seat ring) - Medium gases, steam - Incoming flow against closing direction - Noise reduction up to -30 dB(A)																																	
Pressure balanced plug design																																		
	PTFE-V-ring with stainless steel spring (max. 220°C) - from seat diameter 40 mm - can be combined with parabolic and perforated plug - Leakage class IV acc. to IEC 60534-4 - Medium liquids, gases, steam		Metal multi-plate rings - from seat diameter 40 mm - can be combined with parabolic and perforated plug - Leakage class III acc. to IEC 60534-4 - Medium liquids, gases, steam																															
Flow divider																																		
	Flow divider - can be combined with single-stage Plug design - consists of two-wall perforated plates - Medium gases, steam - Deviations of the characteristic curve in the stroke range > 80 % - Noise reduction up to -17,5 dB(A)	<table border="1"> <thead> <tr> <th colspan="5">Deviating Kvs values for execution with flow divider</th> </tr> <tr> <th>DN</th> <th></th> <th>80</th> <th>100</th> <th>150</th> </tr> <tr> <th>Seat-Ø</th> <th></th> <th>80</th> <th>100</th> <th>150</th> </tr> </thead> <tbody> <tr> <td>Parabolic plug + Flow divider</td> <td>Kvs-value (m³/h)</td> <td>80</td> <td>128</td> <td>320</td> </tr> <tr> <td>Perforated plug+ Flow divider</td> <td>Kvs-value (m³/h)</td> <td>57</td> <td>90</td> <td>225</td> </tr> <tr> <td colspan="5">Alle sonstigen Kombinationen unverändert</td> </tr> </tbody> </table>			Deviating Kvs values for execution with flow divider					DN		80	100	150	Seat-Ø		80	100	150	Parabolic plug + Flow divider	Kvs-value (m³/h)	80	128	320	Perforated plug+ Flow divider	Kvs-value (m³/h)	57	90	225	Alle sonstigen Kombinationen unverändert				
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Flow characteristic glp.: Characteristic curves equal percentage mod. glp.: modified equal percentage																																		

Control valve in straightway form with pneumatic actuator ARI-DP



Actuator data		DP32	DP33	DP34	DP34T
Ø A	(mm)	250	300	405	
Effective diaphragm area		250	400	800	1600
Top mounted handwheel	Ø D1	225	300	400	
	H1	270	284	442	635
Weight		5		17	41

Further technical data of the actuator: refer to data sheet ARI-DP.

Fig. 470

Heights and weights

DN	25	40	50	80	100	150			
Fig. 470	DP32	without pressure balanced plug							
		H (mm)	530	585	585				
	PN63-160 (kg)	31	48	55					
	DP33	H (mm)	585	640	640	680	725	790	
		PN63-160 (kg)	37	54	61	103	155	325	
	DP34	H (mm)	700	755	755	795	840	905	
		PN63-160 (kg)	67	84	91	133	185	355	
	DP34T	H (mm)				1035	1080	1145	
		PN63-160 (kg)				204	256	426	
		DP33	with pressure balanced plug						
			H (mm)		660	660	700	745	810
		PN63-160 (kg)		54	61	103	155	325	
		DP34	H (mm)		775	775	815	860	925
			PN63-160 (kg)		84	91	133	185	355
DP34T		H (mm)				1055	1100	1165	
		PN63-160 (kg)				204	256	426	

Further dimensions refer to page 14.


Spring closes on air failure
max. permissible closing pressures on flow-to-open P2 = 0.
 Observe pressure-temperature-limits, refer to page 2.

DN			25				40					50										
Parabolic plug	Kvs-value	(m³/h)	2,5/ 1,6/ 1	4	6,3	10	2,5/ 1,6/ 1	4	6,3	10	16	25	2,5/ 1,6/ 1	4	6,3	10	16	25	40			
Perforated plug	Kvs-value	(m³/h)	1,6/ 1	2,5	4	6,3	1,6/ 1	2,5	4	6,3	10	16	1,6/ 1	2,5	4	6,3	10	16	25			
Perforated plug two-stage	Kvs-value	(m³/h)	1,3	2,1	3,3	5,3	1,3	2,1	3,3	5,3	8,4	13	1,3	2,1	3,3	5,3	8,4	13	21			
Perforated plug three-stage	Kvs-value	(m³/h)	0,8	1,2	2	3,2	0,8	1,2	2	3,2	5	8	0,8	1,2	2	3,2	5	8	12			
Seat-Ø		(mm)	12	18	22	25	12	18	22	25	32	40	12	18	22	25	32	40	50			
Travel		(mm)	20				20					30	20				30					
			without pressure balanced plug																			
DP32 250 cm²	Spring range (bar)	Air supply pressure min. (bar) ¹⁾	4,4	I. (bar)	160	104	70	54	160	98	66	51	31		160	98	66	51	31			
				II. (bar)	86	38	25		27								27					
DP33 400 cm²	Spring range (bar)	Air supply pressure min. (bar) ¹⁾	5,3	I. (bar)	160	146	98	76	160	140	95	73	45		160	140	95	73	45			
				II. (bar)	160	80	54	41	118	53	35	27		118	53	35	27					
			3,7	I. (bar)		160f)	139f)	108f)	160	160	135	105	64		160	160	135	105	64			
				II. (bar)		139f)	94f)	73f)	160	112	75	58	35		160	112	75	58	35			
2,3-3,7	4,7	I. (bar)		160	160	150		160	160	147	90			160	160	147	90					
		II. (bar)		160	148	115		160	130	101	61			160	130	101	61					
2,0-4,0	5,0	I. (bar)										49						49	31			
		II. (bar)										31						31				
DP34 800 cm²	Spring range (bar)	Air supply pressure min. (bar) ¹⁾	2,6	I. (bar)			160e)	160e)			160a)	160a)	122a)			160a)	160a)	122a)				
				II. (bar)			160e)	160e)			160a)	152a)	93a)			160a)	152a)	93a)				
			3,7	I. (bar)							160	160					160	160				
				II. (bar)							160	160					160	160				
			4,5	I. (bar)											152					152	98	
				II. (bar)											134					134	86	
			with pressure balanced plug																			
DP33 400 cm²	Spring range (bar)	Air supply pressure min. (bar) ¹⁾	4,5	I. (bar)										160					160	160		
				II. (bar)										160						160	160	

I. Fig. 470: PTFE-V-ring unit / EPDM-sealing

II. Fig. 470: Pure graphite-packing

¹⁾ max. differential pressure drop: 6 bar Restriction: a) 5 bar b) 4,5 bar c) 4 bar d) 3,5 bar e) 3 bar f) 5,5 bar


Spring closes on air failure
max. permissible closing pressures on flow-to-open P2 = 0.
 Observe pressure-temperature-limits, refer to page 2.

DN			80					100					150					
Parabolic plug	Kvs-value	(m ³ /h)	16	25	40	63	100	25	40	63	100	160	63	100	160	250	400	
V-port plug	Kvs-value	(m ³ /h)			40	63	100		40	63	100	160	63	100	160	250	400	
Perforated plug	Kvs-value	(m ³ /h)	10	16	25	40	63	16	25	40	63	100	40	63	100	160	250	
Perforated plug two-stage	Kvs-value	(m ³ /h)	8,4	13	21	34	53	13	21	34	53	85	34	53	85	135	212	
Perforated plug three-stage	Kvs-value	(m ³ /h)	5	8	12	20	32	8	12	20	32	50	20	32	50	80	127	
Seat-Ø		(mm)	32	40	50	65	80	40	50	65	80	100	65	80	100	125	150	
Travel		(mm)	20	30				30				30			50			
without pressure balanced plug																		
DP33 400 cm ²	2,3-3,7	Air supply pressure min. (bar) ¹⁾	4,7	I. (bar)	89													
			II. (bar)	57														
2,0-4,0	5,0		I. (bar)		49	31			49	31								
	II. (bar)			28				28										
DP34 800 cm ²	1,5-2,1	Air supply pressure min. (bar) ¹⁾	2,6	I. (bar)	121													
			II. (bar)	89														
	2,4-3,2		3,7	I. (bar)	160													
			II. (bar)	160														
2,8-4,0	Air supply pressure min. (bar) ¹⁾	4,5	I. (bar)		152	97	57	38	152	97	57	38		57	38			
		II. (bar)		131	84	49	32	131	84	49	32		49	32				
1,7-2,6		Air supply pressure min. (bar) ¹⁾	3,1	I. (bar)		160a)	119a)	71a)	46a)	160a)	119a)	71a)	46a)	29a)	71a)	46a)	29a)	
			II. (bar)		160a)	106a)	63a)	41a)	160a)	106a)	63a)	41a)	26a)	63a)	41a)	26a)		
2,4-3,6	Air supply pressure min. (bar) ¹⁾		4,1	I. (bar)			160	101	67		160	101	67	43	101	67	43	
			II. (bar)			157	93	61		157	93	61	39	93	61	39		
with pressure balanced plug																		
DP34 800 cm ²		2,1-3,0	Air supply pressure min. (bar) ¹⁾	5,1	I. (bar)		160	160	160	160	160	160	160	160	160	160	160	
	II. (bar)				160	160	160	160	160	160	160	160	160	160	160	160		
1,5-3,0	Air supply pressure min. (bar) ¹⁾	6,0		I. (bar)													160	160
		II. (bar)															160	
DP34T 1600 cm ²		2,0-4,0	Air supply pressure min. (bar) ¹⁾	6,0	I. (bar)												160	160
				II. (bar)													160	160

 I. Fig. 470: PTFE-V-ring unit / EPDM-sealing
 II. Fig. 470: Pure graphite-packing

¹⁾ max. differential pressure drop: 6 bar Restriction: a) 5 bar b) 4,5 bar c) 4 bar d) 3,5 bar e) 3 bar f) 5,5 bar


Spring opens on air failure
max. permissible closing pressures on flow-to-open P2 = 0.
 Observe pressure-temperature-limits, refer to page 2.

DN			25				40					50												
Parabolic plug	Kvs-value	(m3/h)	2,5/ 1,6/ 1	4	6,3	10	2,5/ 1,6/ 1	4	6,3	10	16	25	2,5/ 1,6/ 1	4	6,3	10	16	25	40					
Perforated plug	Kvs-value	(m3/h)	1,6/ 1	2,5	4	6,3	1,6/ 1	2,5	4	6,3	10	16	1,6/ 1	2,5	4	6,3	10	16	25					
Perforated plug two-stage	Kvs-value	(m3/h)	1,3	2,1	3,3	5,3	1,3	2,1	3,3	5,3	8,4	13	1,3	2,1	3,3	5,3	8,4	13	21					
Perforated plug three-stage	Kvs-value	(m3/h)	0,8	1,2	2	3,2	0,8	1,2	2	3,2	5	8	0,8	1,2	2	3,2	5	8	12					
Seat-Ø		(mm)	12	18	22	25	12	18	22	25	32	40	12	18	22	25	32	40	50					
Travel		(mm)	20				20					30	20					30						
			without pressure balanced plug																					
DP32 250 cm ²	Spring range (bar)	Air supply pressure min. (bar) ¹⁾	0,8-2,4	5,0	I. (bar)	160	160	133	103	160	160	129	100	61	39	160	160	129	100	61	39			
				II. (bar)																				
			6,0	I. (bar)			160	147	160	160	160	144	89	57				160	144	89	57	36		
				II. (bar)																				
DP33 400 cm ²	Spring range (bar)	Air supply pressure min. (bar) ¹⁾	1,5-2,9	5,0	I. (bar)	160	154	104	81	160	149	100	78	47		160	149	100	78	47				
				II. (bar)	160	88	59	46	136	61	41	31		136	61	41	31							
			6,0	I. (bar)		160	161	125	160	160	157	122	75		160	160	157	122	75					
				II. (bar)		160	116	90	160	145	98	76	46		160	145	98	76	46					
DP34 800 cm ²	Spring range (bar)	Air supply pressure min. (bar) ¹⁾	1,5-2,5	4,0	I. (bar)	160f)	120f)	93f)		160	117	91	55			160	117	91	55					
				II. (bar)	112f)	76f)	59f)		85	57	44	26		85	57	44	26							
			5,0	I. (bar)	160f)	160f)	160f)		160	160	160	99			160	160	160	99						
				II. (bar)	160f)	160f)	129f)		160	148	115	70			160	148	115	70						
6,0	I. (bar)							160	160	143					160	160	143							
	II. (bar)							160	160	114					160	160	114							
DP34 800 cm ²	Spring range (bar)	Air supply pressure min. (bar) ¹⁾	2,0-3,0	6,0	I. (bar)				160															
				II. (bar)				160																
			1,5-3,0	5,0	I. (bar)										49						49	31		
				II. (bar)											31						31			
6,0	I. (bar)												78						78	49				
	II. (bar)												59						59	37				
DP34 800 cm ²	Spring range (bar)	Air supply pressure min. (bar) ¹⁾	0,67-1,2	3,5	I. (bar)								102c)						102c)					
				II. (bar)									102c)						102c)					
			4,0	I. (bar)												84f)					84f)	53f)		
				II. (bar)												65f)					65f)	41f)		
0,8-2,4	5,0	I. (bar)												141f)					141f)	90f)				
	II. (bar)													122f)					122f)	78f)				
5,5	I. (bar)														160f)					160f)	109f)			
	II. (bar)														151f)					151f)	97f)			
			with pressure balanced plug																					
DP33 400 cm ²	Spring range (bar)	2,0-4,0	6,0	I. (bar)											160					160	160			
				II. (bar)											160						160			
DP34 800 cm ²	Spring range (bar)	2,1-3,0	5,1	I. (bar)											160						160	160		
				II. (bar)											160						160	160		

I. Fig. 470: PTFE-V-ring unit / EPDM-sealing

II. Fig. 470: Pure graphite-packing

¹⁾ max. differential pressure drop: 6 bar Restriction: a) 5 bar b) 4,5 bar c) 4 bar d) 3,5 bar e) 3 bar f) 5,5 bar

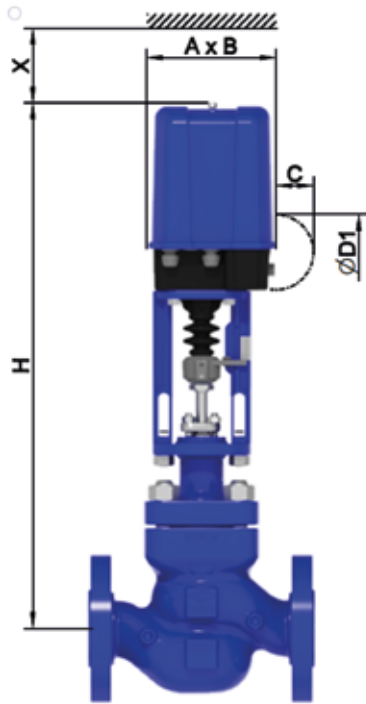

Spring opens on air failure
max. permissible closing pressures on flow-to-open P2 = 0.
 Observe pressure-temperature-limits, refer to page 2.

DN			80					100					150						
Parabolic plug	Kvs-value	(m3/h)	16	25	40	63	100	25	40	63	100	160	63	100	160	250	400		
V-port plug	Kvs-value	(m3/h)			40	63	100		40	63	100	160	63	100	160	250	400		
Perforated plug	Kvs-value	(m3/h)	10	16	25	40	63	16	25	40	63	100	40	63	100	160	250		
Perforated plug two-stage	Kvs-value	(m3/h)	8,4	13	21	34	53	13	21	34	53	85	34	53	85	135	212		
Perforated plug three-stage	Kvs-value	(m3/h)	5	8	12	20	32	8	12	20	32	50	20	32	50	80	127		
Seat-Ø		(mm)	32	40	50	65	80	40	50	65	80	100	65	80	100	125	150		
Travel		(mm)	20	30				30				30		50					
without pressure balanced plug																			
DP33 400 cm ²	1,5-2,5	Air supply pressure min. (bar) ¹⁾	4,0	I. (bar)	54														
				II. (bar)															
			5,0	I. (bar)	98														
				II. (bar)	66														
			6,0	I. (bar)	142														
				II. (bar)	110														
	1,5-3,0		5,0	I. (bar)		49	31			49	31								
				II. (bar)		28				28									
			6,0	I. (bar)		77	49	29		77	49	29			29				
				II. (bar)		56	36			56	36								
			0,67-1,2	4,0	I. (bar)	160													
				II. (bar)	160														
DP34 800 cm ²	0,8-2,4	Air supply pressure min. (bar) ¹⁾	4,0	I. (bar)		83	53	31											
				II. (bar)		62	40			62	40								
			5,0	I. (bar)		140	90	53	35	140	90	53	35		53	35			
				II. (bar)		119	76	45	29	119	76	45	29		45	29			
			6,0	I. (bar)		160	127	75	49	160	127	75	49	31	75	49	31		
				II. (bar)		160	113	67	44	160	113	67	44		67	44			
DP34T 1600 cm ²	2,1-3,0		Air supply pressure min. (bar) ¹⁾	4,0	I. (bar)		106a)	68a)	40a)	26a)	106a)	68a)	40a)	26a)		40a)	26a)		
					II. (bar)		85a)	54a)	32a)		85a)	54a)	32a)			32a)			
				5,0	I. (bar)		160a)	141a)	84a)	55a)	160a)	141a)	84a)	55a)	35a)	84a)	55a)	35a)	
					II. (bar)		160a)	128a)	76a)	50a)	160a)	128a)	76a)	50a)	32a)	76a)	50a)	32a)	
with pressure balanced plug																			
DP34 800 cm ²	2,1-3,0			Air supply pressure min. (bar) ¹⁾	5,1	I. (bar)		160	160	160	160	160	160	160	160	160	160	160	
		II. (bar)					160	160	160	160	160	160	160	160	160	160	160	160	
DP34T 1600 cm ²	2,0-4,0	6,0			I. (bar)												160	160	
					II. (bar)													160	160

 I. Fig. 470: PTFE-V-ring unit / EPDM-sealing
 II. Fig. 470: Pure graphite-packing

¹⁾ max. differential pressure drop: 6 bar Restriction: a) 5 bar b) 4,5 bar c) 4 bar d) 3,5 bar e) 3 bar f) 5,5 bar

Control valve in straightway form with electric actuator PREMIO-Plus 2G



Actuator data		5 kN	12 - 25 kN
A	(mm)	171	210
B	(mm)	156	184
C	(mm)	50	90
Ø D1	(mm)	90	130
X	(mm)	150	200

Further technical data of the actuator: refer to data sheet PREMIO-Plus 2G

Fig. 470

Heights and weights

DN		25	40	50	80	100	150		
Fig. 470	5 kN	without pressure balanced plug							
		H	(mm)	640	695	695			
		PN63-160	(kg)	29	46	53			
		12 kN 15 kN 25 kN	H	(mm)	810	870	870	910	955
	PN63-160		(kg)	32	50	57	99	151	321
	15 kN 25 kN	with pressure balanced plug							
		H	(mm)		890	890	930	975	1040
		PN63-160	(kg)		50	57	99	151	321

Further dimensions refer to page 14.

max. permissible closing pressures on flow-to-open P2 = 0.
Observe pressure-temperature-limits, refer to page 2.

DN			25				40						50							
Parabolic plug	Kvs-value	(m³/h)	2,5/ 1,6/ 1	4	6,3	10	2,5/ 1,6/ 1	4	6,3	10	16	25	2,5/ 1,6/ 1	4	6,3	10	16	25	40	
Perforated plug	Kvs-value	(m³/h)	1,6/ 1	2,5	4	6,3	1,6/ 1	2,5	4	6,3	10	16	1,6/ 1	2,5	4	6,3	10	16	25	
Perforated plug two-stage	Kvs-value	(m³/h)	1,3	2,1	3,3	5,3	1,3	2,1	3,3	5,3	8,4	13	1,3	2,1	3,3	5,3	8,4	13	21	
Perforated plug three-stage	Kvs-value	(m³/h)	0,8	1,2	2	3,2	0,8	1,2	2	3,2	5	8	0,8	1,2	2	3,2	5	8	12	
Seat-Ø		(mm)	12	18	22	25	12	18	22	25	32	40	12	18	22	25	32	40	50	
Travel		(mm)	20				20						30	20						30
			without pressure balanced plug																	
5 kN	Closing pressure	I. (bar)	160	149	101	78	160	144	97	75	46	29	160	144	97	75	46	29		
		II. (bar)	160	83	56	43	125	56	37	29			125	56	37	29				
	Operating time	(s)	53				53						79	53						79
12 kN	Closing pressure	I. (bar)		160	160	160		160	160	160	124	80		160	160	160	124	80	51	
		II. (bar)		160	160	160		160	160	156	96	61		160	160	156	96	61	39	
	Operating time	(s)	53				53						79	53						79
15 kN	Closing pressure	I. (bar)								160	158	102				160	158	102	65	
		II. (bar)								160	129	83				160	129	83	53	
	Operating time	(s)								53	79				53	79				
25 kN	Closing pressure	I. (bar)								160	160					160	160	112		
		II. (bar)								160	156					160	156	100		
	Operating time	(s)								53	79				53	79				
			with pressure balanced plug																	
15 kN	Closing pressure	I. (bar)										160						160	160	
		II. (bar)										160						160	160	
	Operating time	(s)										79						79		

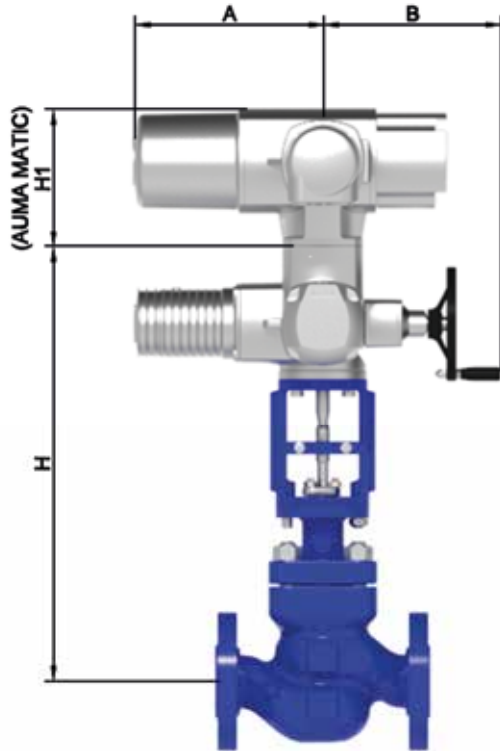
DN			80					100					150				
Parabolic plug	Kvs-value	(m³/h)	16	25	40	63	100	25	40	63	100	160	63	100	160	250	400
V-port plug	Kvs-value	(m³/h)	16	25	40	63	100	25	40	63	100	160	63	100	160	250	400
Perforated plug	Kvs-value	(m³/h)	10	16	25	40	63	16	25	40	63	100	40	63	100	160	250
Perforated plug two-stage	Kvs-value	(m³/h)	8,4	13	21	34	53	13	21	34	53	85	34	53	85	135	212
Perforated plug three-stage	Kvs-value	(m³/h)	5	8	12	20	32	8	12	20	32	50	20	32	50	80	127
Seat-Ø		(mm)	32	40	50	65	80	40	50	65	80	100	65	80	100	125	150
Travel		(mm)	20	30				30					30			50	
			without pressure balanced plug														
15 kN	Closing pressure	I. (bar)	157	101	65	38	25	101	65	38	25		38	25			
		II. (bar)	125	80	51	30		80	51	30			30				
	Operating time	(s)	53	79				79					79				
25 kN	Closing pressure	I. (bar)	160	160	111	66	43	160	111	66	43	27	66	43	27		
		II. (bar)	160	153	98	58	38	153	98	58	38		58	38			
	Operating time	(s)	53	79				79					79				
			with pressure balanced plug														
15 kN	Closing pressure	I. (bar)	160	160	160	160	160	160	160	160	160	100	160	160	100		
		II. (bar)	160	160	160	160	160	160	160	160	160	100	160	160	100		
	Operating time	(s)	53	79				79					79				
25 kN	Closing pressure	I. (bar)										160			160	160	160
		II. (bar)										160			160	160	160
	Operating time	(s)										79			79	132	

Further operating speeds: refer to data sheet ARI-PREMIO/PREMIO-Plus 2G.

Operating time [s] =	Travel [mm] / Stellgeschwindigkeit [mm/s]
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- I. Fig. 470: PTFE-V-ring unit / EPDM-sealing
- II. Fig. 470: Pure graphite-packing

Control valve in straightway form with electric actuator AUMA



Actuator data		SAR 07.2	SAR 07.6	SAR 10.2
A	(mm)	265		283
B	(mm)	249		254
H1 (AUMATIC AC)	(mm)	130		
Supply voltage: 400V 50Hz 3~ (Other voltages on request)				
Technical data for actuator refer to price list.				

Fig. 470

Heights and weights

DN	25	40	50	80	100	150			
Fig. 470	without pressure balanced plug								
	SAR 07.2	H	(mm)	710	765	765	805	855	920
	SAR 07.6	Weight	(kg)	51	70	77	119	171	341
	SAR 10.2								
	with pressure balanced plug								
	SAR 07.2	H	(mm)		785	785	825	875	940
SAR 07.6	Weight	(kg)		70	77	119	171	341	
SAR 10.2									

For version with AUMA SAR Ex other heights.

Further dimensions refer to page 14.

max. permissible closing pressures on flow-to-open P2 = 0.
 Observe pressure-temperature-limits, refer to page 2.

DN		25				40					50											
Parabolic plug	Kvs-value	(m³/h)	2,5/ 1,6/ 1	4	6,3	10	2,5/ 1,6/ 1	4	6,3	10	16	25	2,5/ 1,6/ 1	4	6,3	10	16	25	40			
Perforated plug	Kvs-value	(m³/h)	1,6/ 1	2,5	4	6,3	1,6/ 1	2,5	4	6,3	10	16	1,6/ 1	2,5	4	6,3	10	16	25			
Perforated plug two-stage	Kvs-value	(m³/h)	1,3	2,1	3,3	5,3	1,3	2,1	3,3	5,3	8,4	13	1,3	2,1	3,3	5,3	8,4	13	21			
Perforated plug three-stage	Kvs-value	(m³/h)	0,8	1,2	2	3,2	0,8	1,2	2	3,2	5	8	0,8	1,2	2	3,2	5	8	12			
Seat-Ø		(mm)	12	18	22	25	12	18	22	25	32	40	12	18	22	25	32	40	50			
Travel		(mm)	20				20					30			20			30				
without pressure balanced plug																						
SAR 07.2 Output drive Form A TR 20 x 4 - LH	Closing pressure	I./II.	shut off controlling ¹)	(bar)	160	160	160	154	160	160	160	160	148	95	160	160	160	160	95	61		
				(bar)	160	160	134	104	160	160	115	89	54	34	160	160	115	89	54	34	22	
	Torque			(Nm)	15	15	20	20	15	15	20	25	30	30	15	15	20	25	30	30	30	
	Operating time (50 Hz)			(s)	54				54				56		54				56			
Output drive			(min ⁻¹)	5,6				5,6				8		5,6				8				
SAR 07.6 Output drive Form A TR 26 x 5 - LH	Closing pressure	I./II.	shut off controlling ¹)	(bar)			160	160			160	160	160	142			160	160	160	142	91	
				(bar)			160	160			160	147	90	58			160	147	90	58	37	
	Torque (Nm)			(Nm)	30				30				35		50		30		35		60	
	Operating time (50 Hz)			(s)	43				43				64		43				64			
Output drive			(min ⁻¹)	5,6				5,6				8		5,6				8				
SAR 10.2 Output drive Form A TR 26 x 5 - LH	Closing pressure	I./II.	shut off controlling ¹)	(bar)									160	142					160	142	91	
				(bar)									160	142					160	142	91	
	Torque			(Nm)									60		60		60					
	Operating time (50 Hz)			(s)									43		64		43				64	
Output drive			(min ⁻¹)									5,6		5,6				5,6				
with pressure balanced plug																						
SAR 7.6 Output drive Form A TR 26 x 5 - LH	Closing pressure	I./II.	shut off controlling ¹)	(bar)										160						160	160	
				(bar)										160						160	160	
	Torque			(Nm)									30		30				30		30	
	Operating time (50 Hz)			(s)									64		64				64		64	
Output drive			(min ⁻¹)									5,6		5,6				5,6		5,6		
without pressure balanced plug																						
SAR 07.6 Output drive Form A TR 20 x 4 - LH	Closing pressure	I./II.	shut off controlling ¹)	(bar)	160	139	89	52	34	139	89	52	34		52	34						
				(bar)	86	55	35	20	13	55	35	20	13		20	13						
	Torque			(Nm)	50	60	60	60	60	60	60	60	60		60	60						
	Operating time (50 Hz)			(s)	42,9	64				64				64				64				
Output drive			(min ⁻¹)	5,6				5,6				5,6				5,6						
SAR 10.2 Output drive Form A TR 26 x 5 - LH	Closing pressure	I./II.	shut off controlling ¹)	(bar)	160	160	143	85	56	160	143	85	56	35	85	56	35					
				(bar)	160	139	89	52	34	139	89	52	34	22	52	34	22					
	Torque (Nm)			(Nm)	60	70	90	90	90	70	90	90	90	90	90	90	90					
	Operating time (50 Hz)			(s)	42,9	64				64				64				64				
Output drive			(min ⁻¹)	5,6				5,6				5,6				5,6						
with pressure balanced plug																						
SAR 07.6 Output drive Form A TR 20 x 4 - LH	Closing pressure	I./II.	shut off controlling ¹)	(bar)		160	160	160	100	160	160	160	100	63	160	100	63	63	40			
				(bar)																		
	Torque			(Nm)	30				30				30				30					
	Operating time (50 Hz)			(s)	64				64				64				64		55			
Output drive			(min ⁻¹)	5,6				5,6				5,6				5,6		11				
SAR 10.2 Output drive Form A TR 26 x 5 - LH	Closing pressure	I./II.	shut off controlling ¹)	(bar)					160					160	160				160	160	160	
				(bar)					160					160	160				160	160	160	
	Torque			(Nm)									60		60				60		60	
	Operating time (50 Hz)			(s)									64		64				64		55	
Output drive			(min ⁻¹)									5,6		5,6				5,6		11		

I. Fig. 470: PTFE-V-ring unit / EPDM-sealing
 II. Fig. 470: Pure graphite-packing

¹) Restrictions through max. permissible torque of the actuator at controlling operation

Control valve in straightway form with flanges

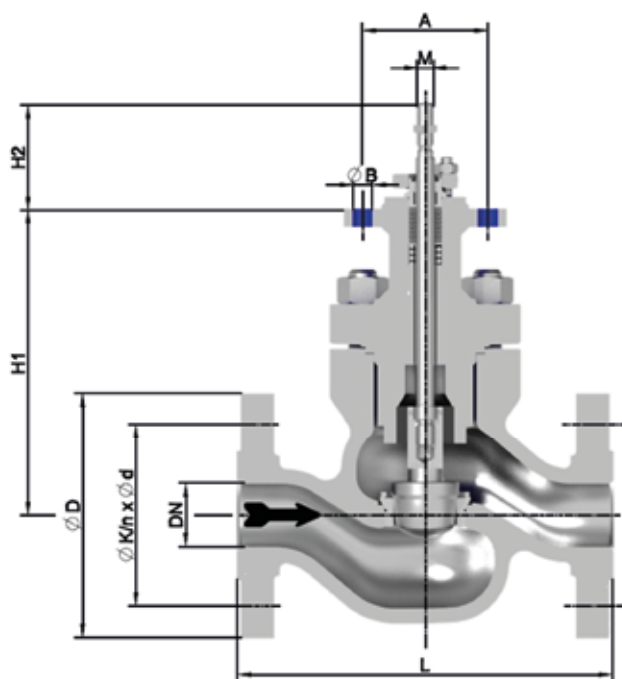


Fig. 470
 DN25-150
 (z.B.: DP32-34; PREMIO 5-25kN; AUMA 07.2-10.2)

DN	25	40	50	80	100	150
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Dimensions								
M	(mm)	M10	M14 x 1,5		M16 x 1,5			
H1	(mm)	187	245	245	284	331	396	
H1 ¹⁾	(mm)	-	265	265	304	351	416	
H2	(mm)						83	
A	(mm)	100			100 / 150			
ØB	(mm)	4 x ø16	4 x ø16		4 x ø16 / 8 x ø16			

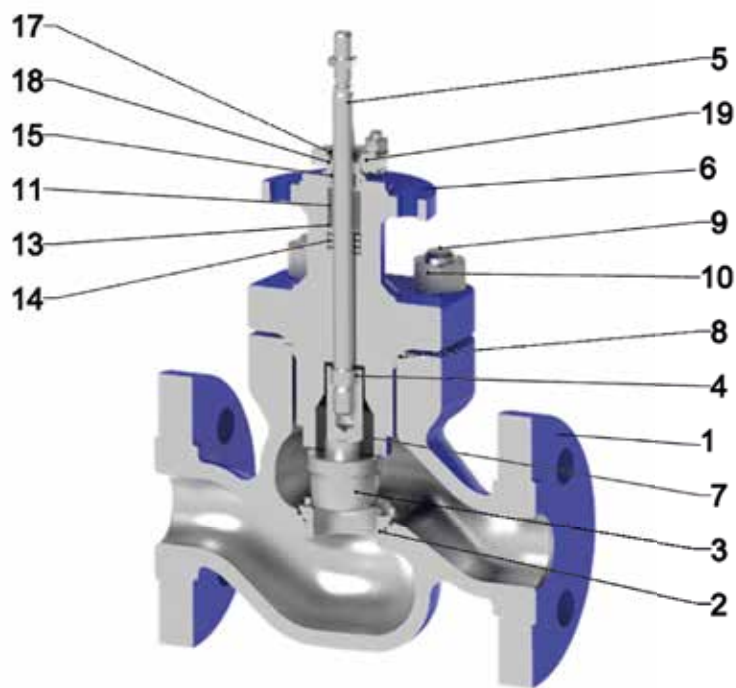
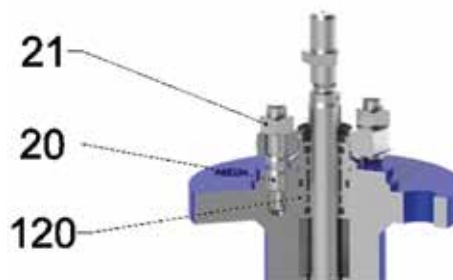
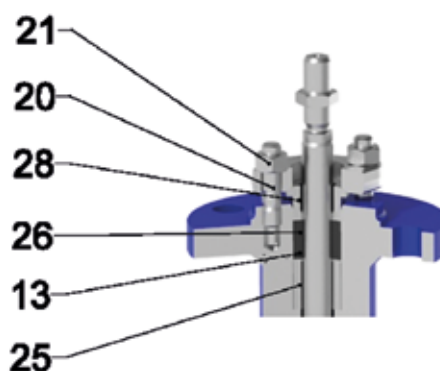
¹⁾ Design with pressure balanced plug

Face-to-face dimension FTF series 2 acc. to DIN EN 558							
L	(mm)	230	260	300	380	430	550

Flanges acc. to DIN EN 1092-1/-2								
ØD	PN63	(mm)	140	170	180	215	250	345
	PN100/160	(mm)			195	230	265	355
ØK	PN63	(mm)	100	125	135	170	200	280
	PN100/160	(mm)			145	180	210	290
n x Ød	PN63	(mm)	4 x 18	4 x 22		8 x 22	8 x 26	8 x 33
	PN100/160	(mm)		4 x 22	4 x 26	8 x 26	8 x 30	12 x 33

Weighte								
Fig. 470	PN63-160	(kg)	22	39	46	88	140	310

max. permissible thrust								
Fig. 470	PN63-160	(kN)	12	25		40		


I. PTFE-V-ring unit

I. EPDM-sealing

II. Pure graphite-packing

Pos.	Sp.p.	Description	Fig. 36.470 / 37.470 / 38.470	Fig. 56.470 / 57.470 / 58.470
1		Body	1.0619+N	1.4408
2	x	Seat ring	1.4021+QT	1.4571
3	x	Plug	1.4021+QT	1.4571
4	x	Clamping sleeve	1.4310	
5	x	Stem	1.4021+QT	1.4980
6		Mounting bonnet	1.0619+QT	1.4408
7		Guide bushing	1.4021+QT (hardened)	1.4571 (hardened)
8	x	Gasket	Pure graphite (CrNi laminated with graphite)	
9		Stud	1.7218	A4-70 (DN150: 1.4908)
10		Hexagon nuts	1.1181	A4 (DN150: 1.4908)
11	Set: refer to Pos. 100	V-ring unit	PTFE / Graphite	
13		Washer	1.4301	
14		Compression spring	1.4310	
15		Guide bush	PTFE25%C	
17		Scraper	PTFE (reinforced)	
18		Stem guiding	1.4305	
19		Packing box flange	1.4980	
20		Stud	1.4980	
21		Hexagon nuts	1.4980	
25	x	Distance bush	1.4021+QT	1.4571
26	x	Packing ring	Pure graphite	
28	x	Packing follower	1.4021+QT	1.4571

Stem sealigen Fig. 470

100	x	V-ring unit (set)	Set of Pos. 11, 13, 14, 15, 17, 18
120	x	EPDM-sealing, cpl.	EPDM / 1.4305
26	x	Packing ring	Pure graphite
		L Spare parts	

